

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An accelerator tube assembly for use in a hydraulic food product cutting system which comprises:

an accelerator tube comprising a frustoconical tube having a first inlet end, a first outlet end smaller than said first inlet end, a first outside surface, and a first inside surface defining a passageway there-through for the passage of a suspension of food products in a fluid from said first inlet end to said first outlet end, said accelerator tube formed of a flexible material having a durometer hardness within the range of twenty to seventy;

an accelerator tube housing having ~~[[an]]~~a second inlet end, ~~[[an]]~~a second outlet end, and ~~[[an]]~~a second inner surface, and configured to receive ~~[[an]]~~said accelerator tube in spaced relationship to said second inside surface, said accelerator tube housing having an inlet sealing ring and an outlet sealing ring;

~~a frustoconical shaped tube defining a passageway there through for the passage of a suspension of food products in a fluid from a larger inlet end to a smaller outlet end, said conical shaped tube formed of a flexible material having a durometer hardness within the range of twenty to seventy;~~

an inlet flange having first and second inlet flange surfaces, attached to and circumventing said frustoconical tube near said first inlet end at a point wherein said first inlet flange surface will be in sealable engagement with said accelerator tube housing inlet sealing ring, said inlet

flange formed of a flexible material having a durometer hardness within the range of twenty to seventy; and

an outlet flange having first and second outlet flange surfaces, attached to and circumvolving said frustoconical tube near said first outlet end at a point wherein said first outlet flange surface will be in sealable engagement with said accelerator tube housing outlet sealing ring, said outlet flange formed of a flexible material having a durometer hardness within the range of twenty to seventy.

2. (Currently Amended) The accelerator tube assembly of Claim 1 wherein said flexible material that said frustoconical ~~shaped~~ tube is formed of rubber.
3. (Currently Amended) The accelerator tube assembly of Claim 1 wherein said rubber material that said frustoconical ~~shaped~~ tube is formed of polyurethane rubber.
4. (Original) The accelerator tube assembly of Claim 1 wherein said flexible material that said inlet flange is formed of is rubber.
5. (Original) The accelerator tube assembly of Claim 1 wherein said rubber material that said inlet flange is formed of is polyurethane rubber.

6. (Original) The accelerator tube assembly of Claim 1 wherein said flexible material that said outlet flange is formed of is rubber.
7. (Original) The accelerator tube assembly of Claim 1 wherein said rubber material that said outlet flange is formed of is polyurethane rubber.
8. (Currently Amended) The accelerator tube assembly of Claim 1 which further comprises a plurality of reinforcing ribs attached to the first outside surface ~~of said conical tube~~, said reinforcing ribs formed of a flexible material having a durometer hardness within the range of twenty to seventy.
9. (Original) The accelerator tube assembly of Claim 8 wherein said flexible material that said reinforcing ribs are formed of is rubber.
10. (Original) The accelerator tube assembly of Claim 8 wherein said rubber material that said reinforcing ribs are formed of is polyurethane rubber.
12. (Currently Amended) The accelerator tube assembly of Claim 8 wherein said plurality of reinforcing ribs are configured as rings attached to and circumvolving ~~the outer~~ said first outside surface ~~of said frustoconical shaped tube~~.

13. (Currently Amended) The accelerator tube assembly of Claim 12 wherein said plurality of reinforcing rings are configured to engage ~~[[the]]~~said second innerinside ~~surface of said housing~~ at a predetermined amount of deflection of said frustoconical tube.

14. (Currently Amended) The accelerator tube assembly of Claim 8 wherein said plurality of reinforcing ribs are configured as a plurality of radially extending ribs attached to ~~[[the]]~~said first outeroutside ~~surface of said frustoconical shaped tube~~.

15. (Currently Amended) The accelerator tube assembly of Claim 14 wherein said plurality of radially extending ribs are configured to engage the second innerinside ~~surface of said housing~~ at a predetermined amount of deflection of said frustoconical tube.

16. (Currently Amended) The accelerator tube assembly of Claim 1 wherein said accelerator tube housing further includes an access door for insertion and removal of said frustoconical tube.

17. (Original) The accelerator tube assembly of Claim 1 wherein said accelerator tube housing further a pair of closeable housing halves.

18. (Currently Amended) An accelerator tube for use within an accelerator tube housing having ~~[[an]]~~ a first inlet end, [[an]] a first outlet end, a first outside surface, and [[an]] a first inside surface, and configured to receive in spaced relationship ~~an accelerator tube,~~ said accelerator tube, said accelerator tube housing having an inlet sealing ring and an outlet sealing ring, said accelerator tube comprising:

a frustoconical ~~shaped-tube,~~ having an second outside surface, and a second inside surface defining a passageway there-through for the passage of a suspension of food products in a fluid from a ~~second larger~~ inlet end to a second smaller outlet end ~~[[,]]~~ that is smaller than said second inlet end, said frustoconical ~~shaped-tube~~ formed of a flexible material having a durometer hardness within the range of twenty to seventy;

an inlet flange having first and second inlet flange surfaces, attached to and circumvolving said frustoconical tube near said second inlet end at a point wherein said first inlet flange surface will be in sealable engagement with said accelerator tube housing inlet sealing ring, said inlet flange formed of a flexible material having a durometer hardness within the range of twenty to seventy; and

an outlet flange having first and second outlet flange surfaces, attached to and circumvolving said frustoconical tube near said second outlet end at a point wherein said first outlet flange surface will be in sealable engagement with said accelerator tube housing outlet sealing ring, said outlet flange formed of a flexible material having a durometer hardness within the range of twenty to seventy.

19. (Currently Amended) The accelerator tube assembly of Claim 18 wherein said flexible material that said frustoconical ~~shaped~~-tube is formed of rubber.
20. (Currently Amended) The accelerator tube assembly of Claim 18 wherein said rubber material that said frustoconical ~~shaped~~-tube is formed of polyurethane rubber.
21. (Original) The accelerator tube assembly of Claim 18 wherein said flexible material that said inlet flange is formed of is rubber.
22. (Original) The accelerator tube assembly of Claim 18 wherein said rubber material that said inlet flange is formed of is polyurethane rubber.
23. (Original) The accelerator tube assembly of Claim 18 wherein said flexible material that said outlet flange is formed of is rubber.
24. (Original) The accelerator tube assembly of Claim 18 wherein said rubber material that said outlet flange is formed of is polyurethane rubber.

25. (Currently Amended) The accelerator tube assembly of Claim 18 which further comprises a plurality of reinforcing ribs attached to ~~[[the]]~~said second outside surface ~~of said conical tube,~~ said reinforcing ribs formed of a flexible material having a durometer hardness within the range of twenty to seventy.

26. (Canceled)

26. (Canceled)

27. (Currently Amended) The accelerator tube assembly of Claim 25 wherein said plurality of reinforcing ribs are configured as rings attached to and circumvolving ~~the~~said second outer surface ~~of said frustoconical shaped tube.~~

28. (Currently Amended) The accelerator tube assembly of Claim 27 wherein said plurality of reinforcing rings are configured to engage the ~~first inner~~ inside surface ~~of said housing~~ at a predetermined amount of deflection of said frustoconical tube.

29. (Currently Amended) The accelerator tube assembly of Claim 27 wherein said plurality of reinforcing ribs are configured as a plurality of radially extending ribs attached to the second outer surface ~~of said frustoconical shaped tube.~~

30. (Currently Amended) The accelerator tube assembly of Claim 29 wherein said plurality of radially extending ribs are configured to engage the ~~first inner~~ inside surface of said housing at a predetermined amount of deflection of said frustoconical tube.

31. (New) The accelerator tube assembly of Claim 25 wherein said flexible material that said reinforcing ribs are formed of is rubber.

32. (New) The accelerator tube assembly of Claim 25 wherein said rubber material that said reinforcing ribs are formed of is polyurethane rubber.